

WHAT IS CLAIMED IS:

1. A reflection type liquid-crystal display apparatus comprising:

a light source; and

5 a liquid-crystal display device including a lower substrate provided with a reflection plate, an upper substrate provided with a transparent film on which a light-reflecting element is provided for reflecting transmitted light toward the lower substrate side, and liquid crystal held between said
10 lower substrate and said upper substrate, said light source being disposed at an end surface of said upper substrate, said liquid-crystal display device being configured so that light incident onto a surface of said upper substrate opposite to a contact surface of said upper substrate with said liquid
15 crystal is reflected by said reflection plate of said lower substrate so as to exit from said surface of said upper substrate opposite to said contact surface of said upper substrate with said liquid crystal,

wherein at least one of end surfaces except the end surface
20 on which said light source is disposed is coated with a reflection layer.

2. A reflection type liquid-crystal display apparatus according to claim 1, wherein said reflection layer is

25 constituted by a selected one of a reflection film, a reflection

sheet and a reflection plate stuck onto said end surface.

3. A reflection type liquid-crystal display apparatus
according to claim 1, wherein an end portion of said upper
5 substrate is protruded more than a corresponding end portion
of said lower substrate so that said light source is disposed
on said protruded end surface of said upper substrate.

10 4. A reflection type liquid-crystal display apparatus
according to claim 1, wherein said reflection layer is provided
on an inner surface of a frame so that at least one end surface
of said liquid-crystal display device is disposed closely on
said frame.

15 5. A reflection type liquid-crystal display apparatus
according to claim 4, wherein a selected one of a reflection
film, a reflection sheet and a reflection plate is stuck onto
said inner surface of said frame.

20 6. A reflection type liquid-crystal display apparatus
according to claim 4, wherein said inner surface of said frame
is made of a metal plate having a light-reflecting function.

25 7. A reflection type liquid-crystal display apparatus
according to claim 1, wherein a polarizer is disposed on said

surface of said upper substrate opposite to said contact surface
of said upper substrate with said liquid crystal.

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